

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number  
**WO 2004/022614 A3**

- (51) International Patent Classification<sup>7</sup>: **C08F 220/18**, 220/22, G02B 1/04
- (21) International Application Number: PCT/JP2003/011301
- (22) International Filing Date: 4 September 2003 (04.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
NO.2002-259862 5 September 2002 (05.09.2002) JP  
NO.2002-259863 5 September 2002 (05.09.2002) JP  
NO.2002-348128 29 November 2002 (29.11.2002) JP
- (71) Applicant (for all designated States except US): **FUJI PHOTO FILM CO., LTD.** [JP/JP]; 210, Nakanuma, Minami-ashigara-shi, Kanagawa 250-0193 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SASAKI, Hi-roki** [JP/JP]; c/o FUJI PHOTO FILM CO., LTD., 210, Nakanuma, Minami-ashigara-shi, Kanagawa 250-0193 (JP). **NEMORI, Ryoichi** [JP/JP]; c/o FUJI PHOTO FILM CO., LTD., 210, Nakanuma, Minami-ashigara-shi, Kanagawa 250-0193 (JP).
- (74) Agent: **SIKS & CO.**; 8th Floor, Kyobashi-Nisshoku Bldg., 8-7, Kyobashi 1-chome, Chuo-ku, Tokyo 104-0031 (JP).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- (88) Date of publication of the international search report: 8 July 2004
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OPTICAL MEMBERS, AND PROCESSES, COMPOSITIONS AND POLYMERS FOR PREPARING THEM

(57) Abstract: Novel optical members formed of a polymer comprising a repeating unit derived from a polymerizable monomer (A) which is a methacrylate derivative having a branched C3-8 alkyl group or a repeating unit derived from a polymerizable monomer (3) which is a (meth)acrylate derivative having a C7-20 alicyclic hydrocarbon group are disclosed. Novel processes for preparing an optical member comprising polymerization of a composition comprising the monomer (A) or the monomer (3) are also disclosed.

WO 2004/022614 A3

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 11301

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08F220/18 C08F220/22 G02B1/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 501 424 A (HOECHST AG) 2 September 1992 (1992-09-02)	
A	W0 90/12044 A (HOECHST AG) 18 October 1990 (1990-10-18)	

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the International filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

15 April 2004

Date of mailing of the international search report

23/04/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Cauwenberg, C

# INTERNATIONAL SEARCH REPORT

(information on patent family members)

International Application No

PCT/JP 98/11301

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0501424	A	02-09-1992	CA 2061771 A	27-08-1992
			EP 0501424 A1	02-09-1992
			JP 4353506 A	08-12-1992
			US 5187769 A	16-02-1993
			US 5239027 A	24-08-1993
WO 9012044	A	18-10-1990	DE 3912149 A1	18-10-1990
			AU 5432990 A	05-11-1990
			WO 9012044 A1	18-10-1990